

Employee Attitude Surveys: Examining the Attitudes of Noncompliant Employees

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Employees ($N = 194$) from a wide variety of organizations participated in this study aimed at describing the attitudes of individuals who refuse to respond to an employee survey request (noncompliers). Noncompliers, in comparison with those individuals who would comply with the survey request, possessed greater intentions to quit, less organizational commitment, and less satisfaction toward supervisors and their own jobs. Noncompliers also possessed more negative beliefs regarding how their organization handles employee survey data (e.g., does not act on survey data). No significant differences were found for work-related demographic variables, satisfaction with pay, and satisfaction with promotion opportunities. Implications for survey research are discussed along with methods to address nonresponse and noncompliance.

Organizational surveys are commonly used to assess employee attitudes and perceptions about relevant work-related issues. The value of the survey as a data-gathering tool, however, is dependent on employees participating in the survey effort. Unfortunately for researchers, response rates appear to be on a decline (Schwarz, Groves, & Schuman, 1998). Although this trend has not been systematically analyzed, oversurveying of employees has been cited as a possible root cause (Saari, 1998).

A low rate of response to organizational surveys may lead to a number of problems. Most directly, a low response rate results in less data, which in turn may limit both the researcher's choices of and power for statistical tests. Relatedly, sample size is directly and negatively related to the magnitude of obtained confidence intervals about sample statistics (e.g., means, correlation coefficients). A low response rate may also diminish, in the eyes of management and employees, the perceived credibility of the obtained data. Finally, and perhaps most importantly, a low response rate may result in a biased sampling of organizational members. Specifically, if survey respondents and nonrespondents differ systematically on the substantive constructs being assessed by the survey, conclusions based solely on respondent data may not generalize to the original sample, and by extension, to the population under study (Rogelberg & Luong, 1998). Therefore, identifying whether respondents differ substantively from nonrespondents to a survey is key in determining whether nonresponse leads to nonresponse bias. Building on this premise, the present study examined the work-related attitudinal characteristics of individuals

who purposely refuse to respond to an employee attitude survey (i.e., noncompliant individuals).

Survey Noncompliance

Survey nonresponse can occur for many reasons. Recently, Rogelberg and Luong (1998) presented four classes of nonresponse. Nonresponse can occur because an individual (a) never actually received the survey (e.g., lost in the mail, away from home), (b) is unable to complete it (e.g., ill, cannot read, physically challenged), (c) misplaces or forgets the survey out of carelessness, or (d) has made a conscious decision not to respond to the survey (i.e., noncompliance).

The first three classes of nonresponse are similar in that in each case, failure to respond is not based on a conscious decision by the survey recipient. In fact, the nonrespondent may have wanted to return the survey, but as a result of extenuating circumstances could not. Nonresponse due to noncompliance, however, represents a purposeful decision to not respond to an employee attitude survey. Response facilitation techniques (e.g., reminder notes) are likely to have little effect on individuals who purposely withhold their participation.

To date, research has not examined the origins or nature of survey noncompliance. Research on noncompliance to other types of requests or directions, however, has generally found that noncompliance is determined by state, trait, attitudinal, and situational variables (Cialdini & Trost, 1998). For example, noncompliance to tax code was related to personality, social norms, and personal financial factors (Weigl, Hessing, & Elffers, 1987). Building on this foundation, one could reason that survey noncompliance represents both a general behavioral tendency explained by a constellation of personality traits (e.g., agreeableness), survey-specific variables (e.g., attitudes toward the survey topic), and contextual variables within the organization (e.g., social norms).

Although it is relatively easy to find published reports of general nonresponse rates (e.g., Roth & BeVier, 1998), we found only one study that approximated the rate of noncompliance to a mail survey. Typically, the nature of nonresponse (e.g., carelessness)

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goes unanalyzed. Sosdian and Sharp (1980) telephoned a random sample of nonrespondents to a mail survey they administered. Of the nonrespondents, 80% participated in the follow-up. A total of 20% of the nonrespondents did not comply with the follow-up interview request. Sosdian and Sharp classified these individuals as the "refusers." Given their 42% response rate, we estimate by extrapolation that approximately 12% of their initial sample were noncompliant. It is important to recognize, however, that noncompliance rates may be both survey- and sample-dependent, and therefore a "typical" noncompliance rate may not exist.

Nonresponse to Employee Attitude Surveys

Given the dearth of literature on noncompliance to employee attitude surveys, we now briefly discuss the related research on nonresponse, in general, to employee attitude surveys. For a review of the literature concerning nonresponse to other types of surveys (e.g., market research, political polling), please see Rogelberg and Luong (1998).

Only a few published studies have examined nonrespondent characteristics to the survey of interest in this study, employee attitude surveys. This previous research is typically post hoc in nature, using either the archival approach or the wave approach. In the archival approach, a researcher first identifies a data set (e.g., personnel records) that can be linked to individuals in the initial data sample. Then, after data collection, code numbers printed on the returned surveys can be used to partition the information in the archival database into two segments: (a) data concerning respondents and (b) data concerning nonrespondents. Direct comparisons between respondents and nonrespondents on the variables included in the archival data set can then be made. Unfortunately, archival databases typically contain only demographic types of information and not employee attitude information.

Using this archival approach, Dreher (1977) found that respondents possessed higher performance appraisal ratings than nonrespondents. No differences between respondents and nonrespondents were found for job level, salary, and length of service to the organization. Using similar procedures on a sample of supermarket checkers, Gannon, Nothorn, and Carroll (1971) found that respondents tended to be female, better performers, and more likely to be well-educated and older than nonrespondents.

Other research examining work-related characteristics and nonresponse has used the wave approach. In the wave approach, individuals who return their surveys prior to the survey deadline are compared with individuals who return their surveys after the survey deadline. The rationale for this approach is that late respondents would have been classified as nonresponders if the survey deadline was observed (Ellis, Endo, & Armer, 1970). Although late respondents cannot truly be considered nonrespondents or noncompliers (i.e., they did return their surveys), this approach may still provide some indirect insight into nonrespondent characteristics.

Using the wave approach, Pace (1939) surveyed recent college graduates about living, vocational adjustments, home and family relations, and sociocivic participation. Also included on the survey was a job satisfaction index. No significant differences were found between early respondents and late respondents on job satisfaction. Some years later, Schwirian and Blaine (1966) studied social and political characteristic of members of the United Automobile

Workers union by administering a mail survey. Of relevance to employee attitude surveys, on-time respondents tended to be more satisfied with their jobs and possessed more positive attitudes toward the union than did individuals who returned their surveys after the survey deadline with prompting.

The Present Study

Research using the archival and wave methodologies provided only limited insight into the characteristics of nonrespondents, in general, and noncompliers, in particular. Although we recognize that studying individuals who will not complete a survey is difficult and seemingly paradoxical, the present study examined attitudinal characteristics of individuals who refuse to participate in an employee attitude survey for their organization. The variables studied are those that are often found on employee opinion surveys: organizational commitment, work satisfaction, pay satisfaction, promotion satisfaction, supervisor satisfaction, satisfaction with the job in general, intentions to quit, and work-related demographic variables. A measure of beliefs about how one's organization handles survey data (e.g., acts on survey data) was also used in this study. Taken together, we focused on work-related attitudinal determinants of survey noncompliance. Therefore, this study does not provide comprehensive insight into noncompliance as a psychological phenomenon in that a number of trait, state, and contextual variables are not examined. This study does, however, provide some insight into the representativeness of obtained data when conducting an employee attitude survey. Specifically, as mentioned earlier, if survey compliers and noncompliers differ systematically on the substantive constructs being assessed (in the case of an employee attitude survey, work attitudes), conclusions based solely on respondent data may not generalize to the original sample and, by extension, to the population under study.

Given the limitations of the above methodologies to study nonresponse, we used an approach to studying noncompliance that attempted to capitalize on the predictive power of behavioral intentions and hypothetical scenarios. Participants in our study stated an intention to complete or not complete an employee attitude survey for their employer. The intention was based on well-defined survey materials (e.g., an actual survey was given to participants) and a specific and well-defined context (e.g., a survey purpose and deadline was provided). Next, the attitudes of participants who indicated an unwillingness to complete the attitude survey for their employer were assessed and compared with the attitudes of those individuals stating they would complete such a survey for their organization. Support for this type of research methodology stems primarily from two bodies of work, with a third body of work providing limited support.

Intentions have successfully predicted behaviors ranging from engaging in premarital intercourse, to buying many types of consumer products, to quitting a job, with reported correlations between intentions and behavior ranging from .4 to .9 (Ajzen, 1988, pp. 114, 119; Fishbein & Ajzen, 1975, pp. 310-311, 373-374; Mobley, Horner, & Hollingsworth, 1978; Sheppard, Hartwick, & Warshaw, 1988). In the most recent and comprehensive meta-analysis, Kim and Hunter (1993) found that when the intention was specific and based on well-defined contextual and time-frame information, the relation between intentions and behavior was very high ($r = .94$, corrected for error of measurement, $n = 5,216$).

Additional support for our intentions-based approach stems from policy-capturing research. Although policy capturing does not explicitly assess intentions, it does ask participants to indicate what decisions they would make or behaviors they would engage in under a particular hypothetical circumstance or scenario that may or may not actually occur. With the exception of Gorman, Clover, and Doherty (1978), a body of literature exists that demonstrates the external validity of policy capturing (Brown, 1972; Chaput de Saintonge & Hathaway, 1981; Kirwan, Chaput de Saintonge, Joyce, & Currey, 1983; Moore & Holbrook, 1990).

Finally, one could also argue that research on assessment centers provides some indirect support for our research methodology in that behavior in a hypothetical situation has been found to relate to actual behavior on the job (e.g., Gaugler, Rosenthal, Thornton, & Bentson, 1987). Overall, past literature appears to justify the use of intentions and hypothetical scenarios as a proxy for studying actual behavior. In the case of studying survey noncompliance, using a proxy for behavior is critical given the elusiveness and difficulty of studying noncompliance.

Hypotheses

Literature from the organizational citizenship behavior (OCB) domain, turnover domain, and survey research domain serve to provide the foundation for our hypotheses.

Job Satisfaction and Organizational Commitment

OCB is defined as extra-role behavior not mandated by a job description, but which in the aggregate promotes the effective functioning of the organization (Organ & Konovsky, 1989). An OCB is discretionary in nature and is not directly or explicitly recognized by the organization's formal reward system. OCBs can be directed toward specific individuals or the organization as a whole. Examples include helping others who have been absent and volunteering for things that are not required (C. A. Smith, Organ, & Near, 1983). Recently, Tomaskovic-Devey, Leiter, and Thompson (1994) described survey response as an extra-role task most likely not covered in job descriptions. Taken together, it appears that completing an employee attitude survey can be thought of as an OCB if one believes that data collected from surveys, in the aggregate, work to improve organizational functioning.

Meta-analytic research has found that job satisfaction, perceived fairness, organizational commitment, and leader supportiveness are robustly and positively related to OCBs (Organ & Ryan, 1995). On the basis of this literature, Hypothesis 1 states that noncompliant individuals, in comparison with those individuals who say they would comply with a survey request, will possess less organizational commitment and less job satisfaction (with work, pay, promotion, supervisor, and job in general).

Intentions to Quit

An intention to quit represents a form of psychological withdrawal from an organization (G. Blau & Boal, 1989). Tomaskovic-Devey et al. (1994) suggested that those employees whose personal identities are not tied to the goals of the firm are less likely to go beyond their job descriptions and take the time to respond to surveys. Relatedly, from an OCB perspective, it could be argued

that an employee who is considering leaving his or her organization would be less willing to perform an OCB on behalf of the organization. As a result, Hypothesis 2 states that intentions to quit will be related to survey noncompliance such that noncompliance will possess greater intentions to quit than compliance.

Beliefs About Organizational Use of Survey Data

It seems fair to expect that employees would be less willing to complete an employee attitude survey for their organization if they believed that their organization could not be counted on to use, explain, or act on the survey data. Empirical research on the more general construct of attitudes toward surveys is consistent with this notion. Specifically, Rogelberg, Fisher, and Maynard (1997) found that employees' attitudes toward surveys in general were negatively related to intentions to participate in future survey work. On the basis of this reasoning and empirical finding, Hypothesis 3 states that noncompliance will possess more negative beliefs regarding how their organization handles survey data.

Overall, this study attempted to address an important methodological issue that affects the generalizability of data collected from employee attitude surveys. Without knowing the characteristics of noncompliant individuals, interpretation of obtained employee survey data is made more difficult. We recognize that studying nonrespondents is a difficult proposition. We also recognize that no single research methodology can provide completely unambiguous answers to research questions. However, we believe that the intentions-based approach, given its strong theoretical and empirical foundation, can provide valuable insights into the characteristics of noncompliant individuals, nonresponse bias, and even OCB.

Method

Participants and Design

Participants from a wide variety of organizations ($N = 194$, 66% female) were recruited by research assistants to participate in this study. Participants met with research assistants individually and were given a preview survey packet to examine. Next, participants indicated a specific intention concerning whether they would or would not complete the employee attitude survey contained in the preview survey packet for their employer, if received at work. The stated intention was based on well-defined survey materials (e.g., an actual survey was given to participants) and a specific and well-defined context (e.g., a survey purpose and deadline was provided). Next, regardless of the participants' stated intentions toward completing the survey for their employer, participants completed a postsurvey for the researcher. It is noteworthy that even though some participants indicated that they would not comply with the survey request for their organization, all participants complied with the researcher's request for data. We postulate that participants complied with the researcher's request because they were in a prescheduled interview with a research assistant they typically knew personally.

Age of the participants ranged from 17 to 77, with an average age of 35 years. Nearly 87% of the sample possessed at least some college education, with 15% possessing a graduate degree. With regard to work-related characteristics, 59% of the sample supervised others, average job tenure was 6.60 years, and average organizational tenure was 7.36 years. A total of 31% of the sample were employed in a government organization, 54% were employed in a private for-profit organization, and 15% were employed in a private nonprofit organization. When asked about the type of industry their organization belongs to, 30% of the sample indicated edu-

cation, 15% service, 10% health care, 9% manufacturing, and 6% retail trade. The remaining 30% of the sample were distributed fairly equally across each of the following industries: agriculture, construction, transportation, communications, utilities, wholesale trade, finance/insurance/real estate, and public administration.

Measures and Materials

Preview survey packet. The preview survey packet contained a typical employee attitude survey, complete with a cover letter and business reply envelope. The detailed cover letter specified that the survey was being conducted to increase understanding of employee opinions and attitudes, thus leading to organizational improvement efforts. Furthermore, the cover letter instructed employees to return their survey in the enclosed envelope within 4 weeks. Anonymity was assured, and a telephone help-line number was provided. The cover letter did not make explicit where the participant was to complete the survey (e.g., at home or work).

The preview survey was professionally formatted and contained the work, pay, promotion, and supervision subscales of the Job Descriptive Index (JDI; P. Smith, Kendall, & Hulin, 1969), the Job in General Scale (Ironson, Smith, Brannick, Gibson, & Paul, 1989), the Intentions to Quit Scale (Parra & Smith, 1995), a measure of organizational commitment (Meyer & Allen, 1991), and general demographic questions.

Assessing noncompliance. After examining the preview packet, the participant indicated whether he or she would or would not complete the preview survey (i.e., the employee attitude survey) for his or her employer (not the experimenter). The interviewer recorded a "yes" if the participant indicated that he or she would complete the preview survey or a "no" if the participant indicated that he or she would not complete the preview survey for his or her organization, if asked.

Postsurvey packet. The postsurvey packet contained instructions, two screening questions, and a host of work attitude questions. The instructions reminded the participant that the interviewer him- or herself would not see any answers to the postsurvey: "They will be put in a sealed envelope and returned directly to the principal researcher with no names attached." Next the participant responded to two questions: "When the interviewer asked you to imagine yourself at work receiving a survey, were you able to imagine yourself in that situation?" and "Would you complete the survey the interviewer showed you for your organization?" Both questions were answered on a 2-point "yes" or "no" response scale. In addition to containing the identical measures found in the preview survey, the postsurvey

included questions asking about the participants' beliefs regarding how survey data are handled by their organization. Table 1 provides sample items and scale reliabilities for each survey measure. A final item asked participants how they would characterize their past response rate to employee opinion or attitude-type surveys administered by their organization. The question was responded to on a 5-point Likert-type scale ranging from 1 (*never respond*) to 5 (*respond to all*).

Procedure

We recruited 35 research assistants unaware of the study's purpose from undergraduate and graduate education and psychology courses. Prior to receiving any training or learning about the study's purpose, research assistants were asked to create a list of 5–10 individuals whom they could interview. The list contained mostly full-time employees whom the assistant knew on a first-name basis. Next, research assistants were trained on basic interviewing skills. To ensure reliability across interviewers, we provided assistants with a scripted protocol of the procedure that they were to use in interviewing and surveying the participants.

Research assistants contacted people on their interview list via telephone, personal visit, or email. Potential participants were asked whether they would be willing to help the research assistant by participating in a short research study he or she was doing for school. No potential participant rejected the research assistant's request to be interviewed. The location and time of the interview were then arranged.

The interviews were conducted in quiet settings, typically in either the research assistant's or participant's residence. Following a script, research assistants first assured the participant of confidentiality and anonymity. Next, participants were asked to imagine themselves at work on a typical day and that they and all of their coworkers had received a packet from their organization via internal mail. The packet contained an employee attitude survey. Participants were told to take as much or as little time as they would normally take to read their mail and that after examining the packet, they would be asked whether they would or would not complete and return the enclosed survey to their employer.

The packet was then given to participants. After examination, participants were asked whether they would or would not complete the survey if they received it at work. Next, regardless of the stated intention, participants were thanked and told that as a separate part of the project, "We would like to know your attitudes on some things, such as your job." Again confidentiality and anonymity was stressed. The postsurvey was then given

Table 1
Attitudinal Measures Included on the Postsurvey

Scale	Sample item	Items	α
JDI subscales ^a			
Work	"Fascinating"	18	.91
Pay	"Well paid"	9	.78
Promotion	"Good chance for promotion"	9	.80
Supervision	"Intelligent"	18	.81
Job in General ^a	"Enjoyable"	18	.88
Intentions to Quit ^a	"Would like to leave"	6	.88
Organizational Commitment ^b	"This organization has a great deal of personal meaning to me"	9	.85
Survey usage beliefs ^c	"Overall, my organization takes the data collected from employee opinion/attitude surveys seriously"	5	.89

^a Responses on a 3-point scale ("Yes," "No," or "?") as to whether words or phrases describe the situation (i.e., work, pay, promotions, supervision). Consistent with the Job Descriptive Index (JDI) protocol (P. Smith, Kendall, & Hulin, 1969), a "yes" was assigned a value of 3, a "no" was assigned a value of 0, and a "?" was assigned a value of 1. ^b Responses on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). ^c Beliefs regarding the handling of survey data by the organization; responses on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*).

to participants to complete. At the conclusion of the meeting, participants were debriefed.

Analyses

On the basis of their intentions to respond, participants were classified into an anticipated respondents group or an anticipated noncompliers group. Anticipated respondents and noncompliers were then compared by means of *t* tests on each of the eight attitude-type variables assessed on the postsurvey. With regard to the nine background variables, anticipated respondents and noncompliers were compared by means of *t* tests on each of the continuous background variables (e.g., age) and were compared by means of chi-square analyses for each of the categorical background variables studied (e.g., sex).

Results

The majority of participants (96%) reported being able to imagine themselves in the workplace situation described to them by the research assistants. Participants were also asked, in written form, the same question asked by the interviewer in oral form, "Would you complete the survey for your organization?" Nearly everyone (97%) responded in a manner consistent with their interview response. Eleven participants who could not imagine themselves in the work situation and/or did not report their intention consistently were dropped from further analyses.

Many participants (84%, $n = 153$) indicated that they would complete the employee attitude survey for their organization, if asked. Those individuals who indicated that they would respond are hereinafter referred to as anticipated respondents (given the aforementioned other reasons for nonresponse such as losing the survey, we recognize that, in practice, some of these individuals would be actual nonrespondents). The remaining 16% ($n = 30$) were individuals who indicated that they would not respond (hereinafter referred to as anticipated noncompliers).

Background Variables

When asked about their response history to past employee opinion surveys administered by their organization, anticipated respondents, on average, indicated that they had a higher return rate to surveys administered by their organization ($M = 3.55$, $SD = 1.53$) than anticipated noncompliers ($M = 2.11$,

$SD = 1.31$) $t(164) = 4.57$, $p < .05$, $d = 0.96$. Anticipated respondents and noncompliers did not differ with regard to gender, $\chi^2(1, N = 182) = 2.796$, $p > .05$, or education, $t(179) = 1.91$, $p > .05$. With regard to work-related demographic variables, anticipated respondents did not differ from anticipated noncompliers on number of years worked in their present job, $t(178) = -1.02$, $p > .05$, years worked in the company, $t(175) = 0.05$, $p > .05$, proportion working full versus part time, $\chi^2(1, N = 181) = 0.087$, $p > .05$, and proportion having supervisory responsibility, $\chi^2(1, N = 182) = 1.12$, $p > .05$. Finally, anticipated noncompliers did not differ from anticipated compliers with regard to the type of organization they were working for (government, private for-profit, and private nonprofit), $\chi^2(2, N = 182) = 2.21$, $p > .05$, nor the type of industry served by their organization (agriculture, mining, construction, manufacturing, transportation, communications, utilities, wholesale trade, retail trade, finance/insurance/real estate, public administration, health care, education, other service), $\chi^2(13, N = 172) = 18.34$, $p > .05$.

Attitudinal Differences

Anticipated respondents and noncompliers were compared on each attitude-type variable assessed on the postsurvey. Anticipated noncompliers, in comparison with anticipated respondents, were significantly less committed to their organization, $t(181) = 2.56$, $p < .05$, $d = 0.51$; less satisfied with their work, $t(181) = 2.58$, $p < .05$, $d = 0.51$; less satisfied with their supervisor, $t(178) = 2.71$, $p < .05$, $d = 0.54$; and less satisfied with their jobs in general, $t(180) = 2.74$, $p < .05$, $d = 0.55$. Anticipated noncompliers reported greater intentions to quit, $t(179) = -2.53$, $p < .05$, $d = 0.51$, and less positive beliefs regarding their organizations' handling of survey data than anticipated respondents, $t(151) = 4.60$, $p < .05$, $d = 1.05$. No significant differences were found for satisfaction with pay, $t(180) = -0.22$, $p > .05$, and satisfaction with promotion opportunities, $t(177) = 0.88$, $p > .05$. Table 2 provides the descriptive statistics for the attitudinal variables by response intention. It is noteworthy that homogeneity of variance existed for all *t* tests conducted ($ps > .05$). Finally, Table 3 provides an intercorrelation matrix of all attitudinal and background variables examined.

Table 2
Anticipated Respondents Versus Anticipated Noncompliers

Attitudinal variable	Anticipated respondents		Anticipated noncompliers	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Organizational commitment ^a	4.37	1.22	3.72	1.52
Satisfaction with work ^a	40.74	12.16	34.00	17.01
Satisfaction with pay	30.68	16.62	31.40	14.56
Satisfaction with promotions	21.45	16.38	18.55	14.55
Satisfaction with supervisor ^a	39.66	12.19	32.80	14.61
Satisfaction with job in general ^a	42.18	11.26	35.76	13.79
Intentions to quit ^a	4.81	6.25	8.06	6.86
Survey usage beliefs ^b	3.07	0.81	2.22	0.81

^a The mean score for anticipated respondents differed significantly from the mean score for anticipated noncompliers ($p < .0125$). ^b Beliefs regarding the handling of survey data by the organization.

Table 3

Intercorrelations Between Noncompliance and Attitudinal and Background Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Compliance ^a	—																
2. Organizational commitment	-.19*	—															
3. Work satisfaction	-.19*	.62*	—														
4. Pay satisfaction	.02	.33*	.25*	—													
5. Promotion satisfaction	-.06	.33*	.20*	.28*	—												
6. Supervision satisfaction	-.20*	.44*	.40*	.33*	.40*	—											
7. Overall satisfaction	-.20*	.62*	.73*	.36*	.32*	.57*	—										
8. Intentions to quit	.19*	-.65*	-.63*	-.30*	-.25*	-.41*	-.67*	—									
9. Survey usage beliefs ^b	-.35*	.38*	.36*	.22*	.44*	.52*	.40*	-.42*	—								
10. Response rate	-.34*	.24*	.30*	.11	.11	.23*	.25*	-.25*	.39*	—							
11. Years on job	.08	.25*	.29*	.17*	-.08	-.06	.18*	-.23*	-.11	-.04	—						
12. Years in company	.00	.31*	.32*	.30*	-.09	-.11	.20*	-.29*	.00	.11	.68*	—					
13. Age	-.05	.29*	.46*	.24*	-.10	.03	.31*	-.38*	.05	.06	.64*	.69*	—				
14. Sex ^c	.12	-.05	-.08	.17*	.06	-.07	-.11	.03	.02	-.10	.00	.02	-.08	—			
15. Amount of education	-.14	.21*	.31*	.00	-.09	.00	.17*	-.16*	.04	.18*	.21*	.27*	.31*	-.07	—		
16. Work status ^d	.02	-.18*	-.20*	-.03	-.02	-.01	-.11	.15*	.00	-.11	-.14	-.19*	-.22*	.06	-.14	—	
17. Supervise other ^e	.08	-.23*	-.18*	-.09	-.20	-.06	-.07	.06	-.09	-.10	-.10	-.07	-.06	-.02	-.10	.03	—

Note. All decimals have been removed.

^a 1 = noncompliance, 0 = compliance. ^b Participants' beliefs regarding how survey data are handled by their organization. ^c 1 = female, 2 = male. ^d 1 = full-time work status, 2 = part-time work status. ^e 1 = supervisory status, 2 = no supervisory status.

* $p < .05$.

Discussion

In summary, noncompliant individuals, in comparison with anticipated respondents, possessed greater intentions to quit and less organizational commitment, were less satisfied with supervisors, their work, their jobs in general, and possessed more negative beliefs regarding how their organization handles survey data. It is noteworthy that noncompliers were demographically representative of the initial data sample on variables such as industry worked in, supervisory status, tenure, and so forth. Overall, our findings were quite consistent with the aforementioned research involving OCB and, for the most part, were supportive of our initial hypotheses that noncompliers were the generally less satisfied employees.

Explaining Noncompliance

Given the correlational nature of this study, we cannot determine the causal direction between employee attitudes and compliance. We speculate, however, that in practice it is difficult to conceive of a situation in which noncompliance to an organizational survey request would cause dissatisfaction and discontent. We believe it is more probable that dissatisfaction and discontent lead to an individual withholding his or her participation in the survey effort. The question then becomes "Why does dissatisfaction and discontent actually lead to noncompliance?" Although we cannot definitively answer this question, research and theory on norms of reciprocity, social exchange, and psychological contracts provide some insights into our findings.

Norms of reciprocity. Reciprocation is considered to be one of the most powerful norms in all human cultures (Gouldner, 1960). In general, the norm of reciprocity states that we help and do things for others who help and do things for us. If one considers providing a satisfying job and work environment as a "nice thing" the

organization provides for the employee, it could be argued that the employee is reciprocating to the organization by fulfilling the organization's request to complete a voluntary employee attitude survey. This notion is consistent with expectancy theory (Vroom, 1964) and equity theory (Adams, 1965), which indicate that satisfaction with one's job and organization can psychologically serve as a valent reward.

Social exchange theory and psychological contracts. In 1964, P. M. Blau introduced the theory of social exchange. Unlike an economic exchange relationship, in which explicit precise obligations are to be rendered at a specific time as indicated by a contract, social exchange represents extra-role activities that are unspecified and occur out of trust and satisfaction toward the organization. Completing an attitude survey would appear to emerge out of the social exchange relationship between the employee and the organization in that it is not part of an explicit contract. According to the theory, when the individual possesses a positive and trusting attitude toward the organization, he or she is not concerned with payment for an extra-role activity. If, however, the positive and trusting attitude does not exist or ceases to exist, extra-role behaviors decrease in frequency and the relationship between the organization and employee becomes one of economic exchange. As a result, an employee with a negative attitude toward the organization may not complete a survey because it is not part of his or her contractual obligations. This reasoning is also consistent with research on psychological contracts.

A psychological contract represents an unwritten agreement that exists between an individual and an organization. When an individual perceives a contract to be broken or violated, he or she is less likely to be committed to the organization and less likely to engage in extra-role behavior. For example, Millward and Hopkins (1998) found that employees with a more positive perception of the psychological contract with their organization were more likely

to work unpaid hours. This notion of a psychological contract also provides a framework for understanding why noncompliance was related to participants' beliefs regarding how their organization handles survey data. It may be the case that when employees feel that their organization does not handle survey data responsibly, a form of psychological contract is broken—a contract that implicitly suggests that if you “ask me my opinions, you need to do something with them, or at the least explain why you did not.” As a result, the employee may reason that if he or she cannot count on his or her organization to act on collected data, there is little reason to engage in the extra-role behavior of completing an employee attitude survey.

Finally, social exchange theory may also help explain why no differences were found between anticipated respondents and non-compliers for pay and promotion satisfaction. It may be the case that pay and promotion satisfaction affect economic exchange relationships, whereas satisfaction directed toward the job, management, and the organization affects social exchange relationships.

Limitations

As with any study, limitations exist that should promote future research and curtail overgeneralization of findings. Although we believe that arguments can be made to suggest that these limitations are not substantive, we acknowledge their existence, as well as their potentially confounding nature.

Cognitive rationalization. One concern arising from the methodological approach we used is that individuals may alter their responses to the postsurvey on the basis of their stated intention regarding the preview survey. For example, it may be the case that after respondents indicated that they would not complete the survey for their organization, they rationalized that to deny an organizational request, they must really dislike the organization. Therefore, our observed findings could be explained by individual post hoc rationalization of the stated intention. One piece of evidence arguing against the potential confounding nature of cognitive rationalization is that for some survey scales (pay satisfaction and promotion satisfaction), no differences between anticipated respondents and noncompliers were found. One would expect that cognitive rationalization would manifest itself in poor attitudes across all the satisfaction scales.

Validity of the intention measure. Our study assumes that intentions can predict actual survey noncompliance. Unfortunately, the actual validity of a survey compliance intention is unknown. It is important to recognize, however, that consistent with the literature demonstrating strong relations between intentions and behavior (e.g., Kim & Hunter, 1993), our compliance intention was specific and based on a well-defined survey and situation. Furthermore, as would be expected, our compliance intention was found to be significantly correlated with participants' response history to past employee opinion surveys. If past survey response behavior was not at all related to the survey intention variable, we would have questioned the validity of the intention. Finally, our findings concerning the attitudes of non-compliers, in comparison with anticipated nonrespondents, were consistent with the extant literature on OCB.

Poststudy to address limitations. To provide some insight into the potential severity of the aforementioned two limitations, we

conducted a small poststudy with 32 undergraduate students enrolled in an introductory psychology course at a large Midwestern university. Students completed a short university satisfaction survey during class time. Students were told that their satisfaction data would be reported, in the aggregate, to the university as part of a trending study. The final question of this satisfaction survey asked students to indicate the likelihood of responding to another satisfaction survey that the university would be administering in the near future by E-mail (all the students possessed E-mail accounts). The description of the E-mail survey was thorough and included information concerning the survey content, response scales, number of questions, time frame, and purpose. To reiterate, student satisfaction was assessed prior to the E-mail response intention (in contrast with the procedure in the main study where the intention was stated before assessing satisfaction). The stated intention was correlated ($r = .45$) with general satisfaction toward the university (i.e., satisfied students expressed a greater willingness to participate in the follow-up survey than less satisfied students). Although these data do not completely rule out the cognitive rationalization explanation, we argue that the convergent findings coupled with the aforementioned arguments, at the very least, lessen the cognitive rationalization concern.

To address the “validity of the intention,” we collected some additional data from the same student sample. Before describing our next steps, it is important to note that the 32 students provided their names on the original satisfaction surveys they completed in class (i.e., the names were attached to consent forms). A few weeks after completing the in-class survey, the 32 students received the university attitude survey described in class. Because this survey was administered by E-mail, when students replied to it we were able to identify the names of respondents (by elimination we also identified the names of nonrespondents). Next, using the original E-mail intention data coupled with the names of respondents to the E-mail survey, we partitioned students into four groups: (a) students who indicated that they would complete the E-mail survey and did (35%; 11 students), (b) students who indicated that they would complete the E-mail survey and did not (41%; 13 students), (c) students who indicated that they would not complete the E-mail survey and did not (24%; 8 students), and (d) students who indicated that they would not complete the E-mail survey but did (0%; 0 students). We labeled the first group *respondents*. We labeled the second group *unintentional nonrespondents* (e.g., nonresponse due to inability). We labeled the third group *noncompliers*. No students fell into the fourth group. The final analytic step involved contrasting each group's university satisfaction scores, as indicated by the in-class survey. University satisfaction scores ranged from 0 to 54. Respondents were the most satisfied ($M = 44.60$, $SD = 8.11$). Unintentional nonrespondents possessed similar satisfaction scores ($M = 41.75$, $SD = 13.72$). Noncompliers, however, were the most dissatisfied ($M = 34.57$, $SD = 17.24$). Although we do not have enough data to run meaningful inferential analyses, it is noteworthy that the pattern of results was nearly identical to the results we obtained using the intentions methodology in our main study. We are not suggesting that we validated our intention measure; instead, we are suggesting that the convergence of evidence, to some extent, allays the validity of intentions concern. Taken together, we reason that a survey compliance intention conveys useful information concerning survey behavior.

Implications

The implications of our findings for organizational researchers are relatively straightforward. Obtained survey data will generally appear more positive toward jobs, management, and the organization than would be the case if all employees in the initial sample returned their surveys. However, this implication operates under two assumptions. The first assumption is that some level of noncompliance is inevitable in every survey effort. The second assumption is that unintentional nonrespondents (e.g., on vacation) are attitudinally similar to respondents (or at the very least not more favorable than respondents). Finally, it is important to recognize that although our data suggest that some bias will exist, the magnitude of the bias may be survey and population dependent.

This bias resulting from noncompliance can be managed in a post hoc manner through weighting procedures. Specifically, observed statistics can be "adjusted" depending on the estimated extent and magnitude of noncompliance. For example, let's say 100 employees are surveyed with a 70% response rate. On the basis of the returned data, a mean job satisfaction score is calculated ($M = 3.00$, $SD = 1.00$). To be conservative, one can estimate that all nonrespondents were overt noncompliers (a 10%–20% noncompliant rate may be more appropriate). Next, one estimates the job satisfaction scores of noncompliers. On the basis of this study's data, noncompliers' job satisfaction was approximately a half standard deviation "lower" than that of respondents. Given this information, one can now calculate a weighted mean. In the case of this example, assuming that higher scores refer to greater job satisfaction, the weighted job satisfaction mean would be 2.85. This adjusted mean, although based on a number of assumptions, may be a more accurate representation of the overall job satisfaction score across the 100 employees in the initial sample. At the very least, it may be a useful statistic to report along with the statistics generated from respondent data.

The effects of noncompliance may also be managed in a proactive manner. Specifically, the strongest correlate of noncompliance was participants' beliefs regarding their organization's handling of survey data. It may be the case that organizations that show a commitment to acting on survey data, provide feedback concerning survey findings and potential action plans, and implement changes based on survey data (or at the very least explain why they did not make changes) may be able to minimize future noncompliance.

Another related way to mitigate noncompliance is to prevent oversurveying. Employees who are constantly surveyed may begin to believe that their data are neither being taken seriously nor acted on. This notion is consistent with the work of Goyder (1986) who found that attitudes toward surveys were negatively related to the number of survey requests received by the potential respondent. The following guidelines suggested by Edwards (1997) may be useful when deciding on whether to survey employees: (a) Does an actual and important need exist? (b) Is a survey the best way to address the need? and (c) Are the stakeholders committed to acting on the results of the survey efforts (or at least committed to explaining why they did not act)?

Future Research

Given our interest in nonresponse bias, this study examined attitudinal determinants of noncompliance. However, as men-

tioned earlier, individual difference and situational and social variables may also affect compliance. Certainly, the modest correlations we observed between attitudes and noncompliance suggest that additional variables are needed to provide thorough insight into noncompliance as a psychological phenomenon. To provide a sense of organization to the types of variables that should be studied in future research, we created a preliminary framework for understanding compliance (see Figure 1). This descriptive model attempts to outline major determinants of survey compliance.

The variables included in the framework stem mainly from three bodies of research: the compliance literature, the survey response rate literature, and the OCB literature. We posit that the intention to comply with a survey request is determined by eight interrelated factors. The first factor is an individual traits factor. Individuals who are predisposed to be more agreeable, more altruistic, and possess greater positive affect may be more willing to comply with a survey request. The next factor, attitudes toward surveys, represents a drive to complete surveys in general. This drive, which goes beyond the specific survey presented to the individual, stems from an individual's overarching attitudes about the value of survey research and his or her attitude about the actual act of filling out a survey (e.g., "I hate filling out surveys"). The third factor, survey-specific impressions, refers to individuals' perceptions of the survey itself (e.g., length, complexity, difficulty, and clarity) and a general interest in the topic itself (e.g., perceived importance of the topic.) More favorable survey impressions should lead to greater intentions to comply. The fourth factor represents an individual's beliefs regarding if and how the survey data from the

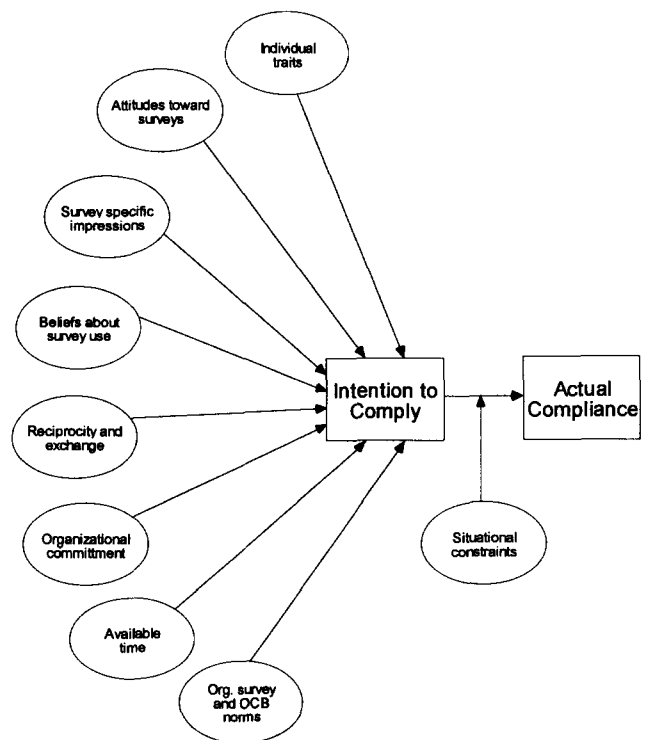


Figure 1. A framework for studying survey compliance. Org. = organizational; OCB = organizational citizenship behavior.

specific survey will be used (e.g., the data will be ignored). Individuals who believe that the sponsor will effectively use the survey data should be more likely to comply with a survey request. Most likely, this belief is affected by perceptions of how survey data from past survey efforts have been handled.

The next two factors are linked to employees' work attitudes. The organizational commitment factor suggests that response to an employee survey is affected by the potential respondent's commitment to the organization. In other words, employees whose personal identities are tied to the goals of the firm are more likely to take the time to respond to a survey that theoretically helps the organization to function. The next factor, the reciprocity and exchange factor, suggests that employees who feel that their organization has been "good to them" (e.g., the employee is satisfied with his or her job, supervisor, etc.) may feel obligated to respond to the survey out of a norm of reciprocity or a social exchange relationship.

The last two factors are more contextual in nature. Available time represents individuals' beliefs regarding their present workload. Individuals with "free" time should be more likely to comply with the survey request. The final factor, organizational survey and OCB norms, refers to a prevailing sense of what is "appropriate" survey behavior in the employee's organization and what the organizational climate is for survey response. In other words, norms may exist that create implicit expectations for the performance of certain OCBs like completing employee surveys. Norms favorable to survey response should translate to a greater intention to comply.

Taken together these eight factors are posited to affect an individual's intention to comply with a survey request. This intention, in turn, should translate to actual compliance to the extent that situational constraints such as losing the survey, forgetting the survey, having a crisis at work, or going on vacation do not materialize.

Overall, our general framework suggests that a number of individual differences, survey, contextual, and social factors need to be examined in future survey response research. To truly gain insight into noncompliance, the factors should be examined across time using both quantitative and qualitative methods. Taken together, examining a full range of potential noncompliance determinants will not only provide insight into noncompliance as a psychological phenomenon, but will also provide insight into what an organization can and cannot do to affect noncompliance.

Future research should also attempt to examine actual response behavior. Unfortunately, approaches for studying actual response behavior possess limitations and are typically not able to clearly delineate reasons for nonresponse (e.g., noncompliance vs. inability). Take for instance the follow-up interview approach. Follow-up phone interviews can be conducted with individuals who do not return the initial survey. However, if a follow-up phone interview (assuming compliance) leads to more socially desirable responding, observed differences between respondents and "nonrespondents" may be due to the methodology rather than to characteristics of nonrespondents.

The noncompliance rates for our main study, poststudy, and the study by Sosdian & Sharp (1980) were consistently low. Although all three of these noncompliance rates were generally in the same range of one another, it is important to recognize the possibility that typical rates associated with noncompliance, inability, care-

lessness, and unavailability may not exist. Instead, nonresponse rates for these various classes of nonresponse may be population and survey dependent. Future research should address this issue.

Finally, our sample was predominantly female, relatively young, and the majority was from the education industry. Given that this study is the first to begin documenting the work-related attitudes of noncompliers to employee attitude surveys, it is essential that additional populations be studied (e.g., a male-dominated manufacturing sample).

Conclusion

This study quantified attitudinal differences between anticipated respondents and anticipated noncompliers. We recognize that studying nonresponse, in general, and noncompliance, in particular, is a difficult endeavor and that our research methodology, like other methods to study nonresponse, possesses limitations. However, we believe that our study is a good step in the direction of understanding the attitudes of a group of people who are typically difficult to assess, noncompliers.

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